



*United States Attorney  
Southern District of New York*

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June 25, 2024

**VIA ECF**

The Honorable Alvin K. Hellerstein  
United States District Judge  
Southern District of New York  
500 Pearl Street  
New York, New York 10007

**Re: *United States v. Hwang and Halligan,*  
S1 22 Cr. 240 (AKH)**

Dear Judge Hellerstein:

The Government respectfully writes to supplement its motion to preclude the defendant Bill Hwang from offering certain misleading and irrelevant slides and related testimony through his expert witnesses, Dr. Michael Johannes and Dr. Sunil Wahal, (ECF No. 233), and to reply to the defendant's opposition letter (ECF No. 236).

Last evening, the defense produced to the Government 43 additional slides for use during the testimony of Dr. Johannes and Dr. Wahal. While some slides reflect material that was included in previously-produced DX 9151 and 9152, which the Government addressed in its June 24 letter, other slides were marked as exhibits for the first time. The Government writes to raise certain objections to the materials first produced last night, and to respond to certain arguments raised by the defense in their June 24 letter.<sup>1</sup>

**I. The Government's Objections to the Defendant's Newly Produced Materials**

The Government objects to the following slides and associated testimony that were first marked as defense exhibits last night:

**A. DX 9122**

This exhibit is labeled "Client Trade Volume as Percent of ADV by Archegos and Other Firms, Per Goldman Sachs Supervisory Reports, for February 22, 2021 – March 22, 2021." The exhibit appears to compare Archegos's trades through Goldman Sachs during a one-month period

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<sup>1</sup> The Government attaches the exhibits referenced in this letter as Exhibit A.

with the trades of other Goldman Sachs clients, based on an internal report that Goldman Sachs published. This slide and associated testimony should be excluded for at least three reasons:

First, the defense has not previously provided notice that Dr. Wahal would adopt and present Goldman Sachs's "supervisory reports" as his own in connection with any opinion he would offer. The defense's March 2024 disclosure of Wahal's opinions mentions Goldman Sachs one time in connection with a different subject and does not describe the methodology of Goldman Sachs reports or provided a basis from which their reliability or accuracy could be tested. *See* Wahal Disclosure ¶ 15. The admission of this new opinion may necessitate rebuttal evidence on the actual significance of these reports.

Second, DX 9122 does not reflect any analysis that Dr. Wahal or his team performed or of which he would have any knowledge. Instead, it appears to reflect portions of an analysis performed by unnamed Goldman Sachs employees that Dr. Wahal then put into chart form. DX 9122 and any associated testimony, therefore, merely amount to Dr. Wahal describing what he thinks Goldman Sachs did and what it might mean without any apparent basis for doing so. While an expert may rely on hearsay in reaching his opinions, a "party cannot call an expert simply as a conduit for introducing hearsay under the guise that the testifying expert used the hearsay as the basis of his testimony." *Malletier v. Dooney & Bourke, Inc.*, 525 F. Supp. 2d 558, 666 (S.D.N.Y. 2007).

Third, the comparison of Archegos's trades to the trades of other, unidentified funds is misleading. As the notes to the slide reflect, Dr. Wahal excludes multiple Goldman Sachs clients, blank client names, and observations where the client "is greater or equal" to 100% of market volume. *See* Notes to DX 9122. What effect these exclusions have on the accuracy of the resulting summary slide or analysis is unknown and reported.

The slide should be excluded either under Rule 702 or under Rule 403.

## **B. DX 9154**

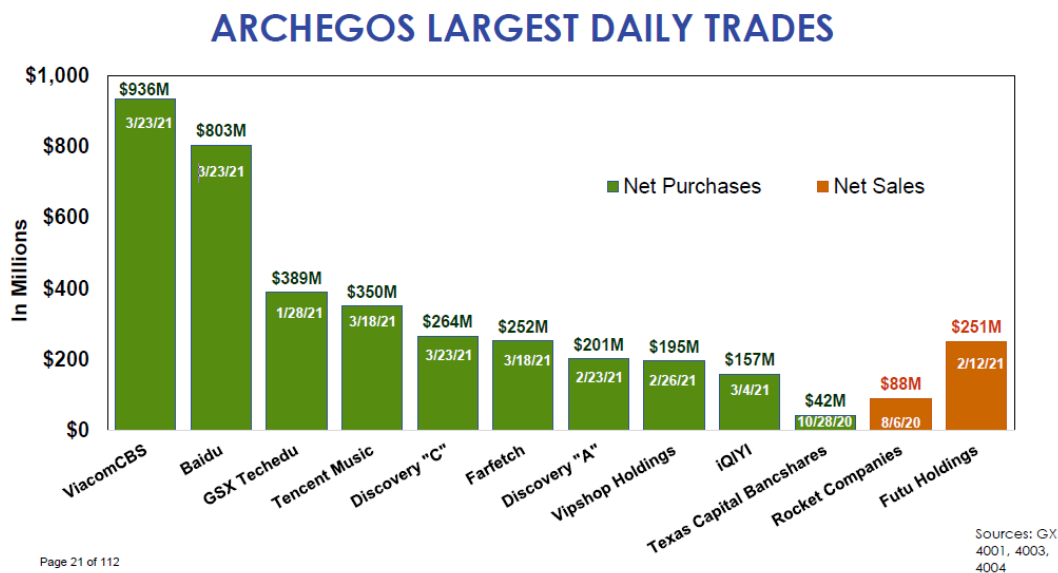
The defense repeats the same improper approach with DX 9154. This exhibit is an eight-page report published by the New York Stock Exchange titled "Off-Hours Volumes Surge." It was not authored by Dr. Wahal. The report claims to study the "growth in off-hours volume" of trading in certain stocks, none of which relate to the charges in the Indictment. As with the Goldman Sachs reports, this third-party report is hearsay, is based on data the defense has not made available to the Government (and may not even possess), and should be excluded on that basis alone.

## **C. DX 9164**

This exhibit is labeled "Archegos's Net Purchases of Long Positions as a Percent of Capital Greater Than or Equal to 1% January 1, 2020 - March 23, 2021." The chart is misleading and should be precluded under Rules 401, 402 and 403 of the Federal Rules of Evidence.

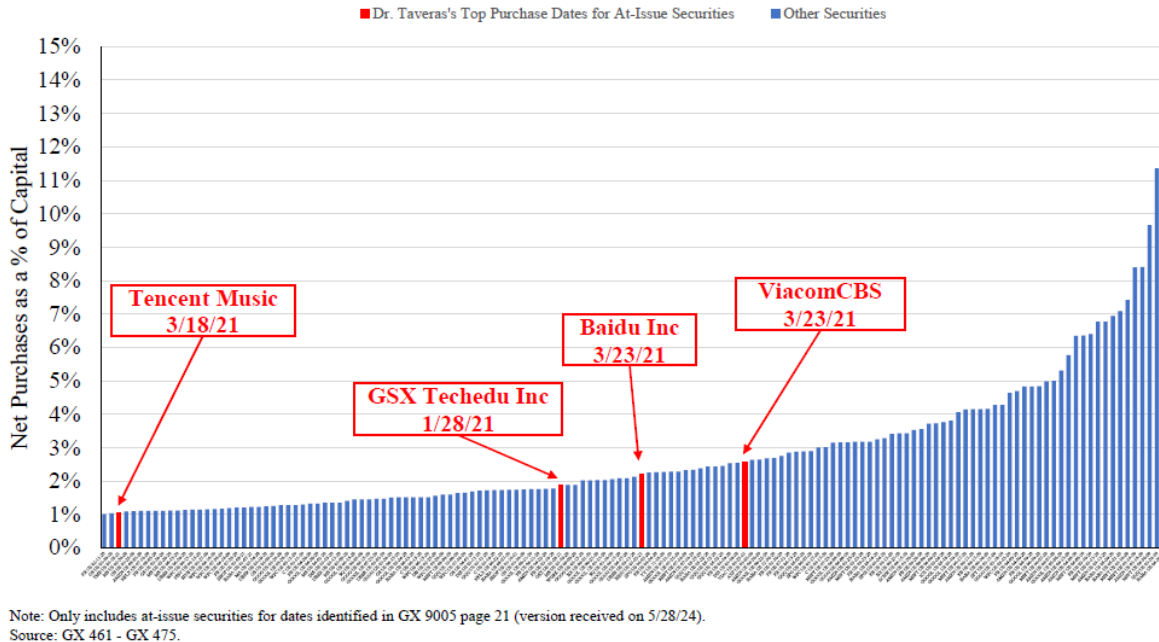
First, despite its label, the chart is not a visual depiction of Archegos's net purchases that were greater than 1% of capital. Instead, the chart takes an limited set of purchases from a slide that Dr. Carmen Taveras prepared, but that the Government did not offer into evidence, and plots that information on a new chart that lists entirely different information. The result is to give the jury the false impression that Archegos's trades in the Top Securities were relatively small by comparison. They were not.

As the Court may recall, Dr. Taveras prepared a chart that listed Archegos Largest Daily Trades in the Top Long Securities. A copy of the chart is below:



The defense objected to the chart, and the Court held that, if the Government wished to offer the chart, the Government needed to include the percent of capital of each trade on the chart. The Government instead elected not to offer the chart into evidence.

Now the defendant has prepared his own chart. This chart includes only the purchases that were listed on Dr. Taveras's chart, and plots those purchases in a sea of other purchases by Archegos, as seen below:



This chart should be excluded for several reasons. First, the label the defense wishes to use—"Dr. Taveras's Top Purchase Dates for At-Issue Securities"—has no meaning at this trial, because Dr. Taveras did not testify about the label at trial. Second, by using Dr. Taveras's prior label, the defense creates a highly misleading and internally inconsistent chart. For instance, while the chart only lists the single highest purchase for the Top Long Securities, it includes dozens of purchases in names like Amazon, Microsoft and Google. That is not because there were no other large purchases of the Top Long Securities; to the contrary, there were plenty. The defense just chose to keep them off this chart to make the results look better. Third, adding to the misleading nature of this chart is the fact that nearly all of the top purchases that were greater than 1% of capital were made in the spring 2020, when Archegos's capital had dropped due to the Covid-19 sell-off. That fact, however, is totally obscured on the chart because the chart does not include the size of each purchase, or the size of Archegos's capital at the time of the purchase.

For all of these reasons, the Court should preclude the defense from offering this chart into evidence. If, however, the Court disagrees, the defense should be required to make the following changes to the chart. First, instead of limiting the chart to "Dr. Taveras's Top Purchase Dates for At-Issue Securities," the defense should be required to include all purchases that were greater than 1% of capital, just as they included all purchases for the securities like Amazon, Microsoft and Google. Second, the defense should be required to list the purchase amount and amount of capital for each transaction listed on the chart.

**D. DX 9167**

This is a chart with the title “Negative News in the Last Week.” The chart appears to list the dates and titles of fifteen news reports that were published during the final week before the Archegos collapse. This slide should be excluded as hearsay and under Rule 403. There is no basis to admit into evidence a cherry-picked list of news articles that Dr. Johannes may, or may not have, read in connection with this testimony. The Court should exclude this slide.

**II. The Government’s Reply to the Defense’s June 24 Letter**

As described in the Government’s initial letter motion, the previously disclosed charts include numerous misleading, irrelevant, and improper assertions. The defendant’s response in opposition does not provide any basis for the Court to admit those slide and, to the contrary, confirms they should be precluded.

**A. DX 9110, 9111, 9112, 9113, 9119, 9120, and 9121.**

While the defense has modified portions of the Dr. Wahal slides in response to the Government’s June 24 letter, further modifications are necessary to avoid misleading the jury. Specifically, DX 9110, 9111, 9112, 9113, 9119, 9120, and 9121 still include references to “Professor Battalio” and his files, algorithms or methodologies, even where the defense has altered the methodology. These labels are superfluous and argumentative. They add nothing of substance to the testimony. For this reason, and those set forth in the Government’s June 24 letter, labels that reference Professor Battalio should be removed from these slides before Dr. Wahal testifies.

**B. DX 9124, DX 9149, and page 5 of DX 9151.<sup>2</sup>**

In response to the Government’s letter, the defense seeks to offer three charts that present price change information for securities other than those in the Archegos portfolio. In other words, despite the Government’s sound objection on relevance grounds, the defense still seeks to present the jury with the price changes of *thousands* of unrelated securities over the course of a 13-month period. The defendant offers no response to the Government’s argument that including stocks like Moderna and Nikola, among many others, is irrelevant and distracting. Nor has the defense attempted to justify the use of the title “Household Name Stocks” for DX 9124, which appears to be a thinly-veiled reference to the same term that the defendant and others at Archegos used to describe the securities in the Archegos portfolio during the final week.

Moreover, far from any sacrifice, the slides that the defense has offered to cut on cumulativeness grounds are duplicative of the slides they still seek to offer. For instance, all but one of the single stock charts that the defense included in DX 9151, which the Government

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<sup>2</sup> It does not appear that the defense produced a new stamped version of the chart originally found at page 5 of DX 9151.

objected to, are included within DX 9124. Thus, the defense still seeks to present irrelevant and misleading information, even if they have reduced the number of slides they seek to use to do so.

In opposing the Government's letter, the defense claims that their charts are a response to Dr. Taveras's chart that the Archegos portfolio outperformed the S&P 500 ETF during the relevant time period. Not so. The defense charts say nothing about the cumulative returns or performance of these securities during the same time period that the Archegos portfolio grew or about the S&P 500 generally. Instead, they merely catalogue the price movements of thousands of securities that went up—during whatever slice of time, and for whatever reason, including fraud—including those that are not part of the S&P 500. Nor are these charts a response to Dr. Taveras's charts that compare the stock price changes of the Archegos securities to the relevant market and industry ETFs. To be sure, the defense has other charts that attempt to make this type of comparison, and the Government has not objected to those charts. But DX 9124, DX 9149, and page 5 of DX 9151 do nothing of the sort, and should be precluded from trial.

### **C. DX 9134 and 9135**

The Court should preclude the defendant from offering DX 9134 and 9135, which depict the concentration levels for investment funds *other than* Archegos. These slides are irrelevant, confusing and a waste of time.

The defendant argues that these slides are a response to Dr. Taveras's testimony about Archegos's concentrated portfolio. But the defense misreads the testimony. Dr. Taveras presented testimony on the concentration of Archegos's portfolio – something that is not in dispute – and then testified that it is unusual for an investment fund to have a position as large as Archegos's position in Viacom “without [also having] voting rights.” (Tr. 2054). Dr. Taveras offered no commentary on Archegos's concentration as a whole. Nor did she opine on usual or unusual concentration levels in the industry. These slides the defendant has put together are a blatant attempt to distract the jury from the defendant's actions by instead focusing on the investment decisions of other funds that have no resemblance to Archegos.

### **D. DX 9156 and 9157**

For the reasons set forth in the Government's June 24 letter, the Court should preclude Dr. Johannes from conducting his “what if” hypothetical on the final week. The defendant's only response to the Government's letter is to claim that Dr. Johannes has a sound methodology for his work. But that methodology is no more than addition and subtraction, something the jury does not need an expert to do, and at its core rests on an entirely fictitious scenario. Instead, the defense wishes to use Dr. Johannes to cloak their “extraordinary coincidences” theory during the final week in the guise of expert testimony. The Court, however, should exercise its gatekeeping function to prevent the defense from doing so.

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For the reasons set forth above, the Government respectfully requests that the Court preclude the defendant Bill Hwang from offering certain misleading, irrelevant, and argumentative slides and related testimony through Dr. Johannes and Dr. Wahal.

Respectfully submitted,

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Cc: Counsel of Record (via ECF)